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GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER
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NGUYEN, KIEN T

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HIROYUKI HOJO and RYUSUKE NAKANISHI

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Appeal 2009-004973  
Application 10/758,019  
Technology Center 3700

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Decided: September 2, 2009

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Before ERIC GRIMES, RICHARD M. LEBOVITZ, and STEPHEN  
WALSH, *Administrative Patent Judges*.

WALSH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) involving claims to a balance practicing machine. The Patent Examiner rejected the claims for obviousness. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

## STATEMENT OF THE CASE

The invention “relates to a balance practicing machine used to practice balancing the body and to provide exercise for the user.” (Spec. ¶ 1.) In the prior art, “[a] machine has been disclosed which provides the same type of movement encountered when riding a horse, thus making it possible to practice balancing without the restrictions of location and weather associated with actual horseback riding.” (*Id.* at ¶ 2.) The present invention is said to improve on the prior art by providing “a drive mechanism that imparts a swinging motion to a seat, expandable and contractible members attached to a seating surface of the seat, and a mechanism to expand and contract the expandable and contractible members.” (*Id.* at ¶ 6.)

Claims 1-11, 13-18 and 20-24, which are all the pending claims, are on appeal. Independent claims 1 and 18 read as follows:

1. A balance practicing machine comprising:
  - a seat on which a user sits;
  - a drive mechanism that imparts a swinging motion to said seat;
  - an expandable and contractible member provided at a location of said seat corresponding to thighs of the user sitting on said seat; and
  - a mechanism that automatically repeatedly expands and contracts said expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during the operation of the drive mechanism to provide compound motion to the seat.
  
18. A balance practicing machine comprising:
  - a seat;
  - a drive mechanism that imparts a swinging motion to said seat;
  - a moving device that is repeatedly actuated during operation of said drive mechanism to provide compound motion to said seat, wherein said moving device comprises:

an expandable and contractible member provided at a location of said seat corresponding to thighs of the user sitting on said seat; and a mechanism that automatically repeatedly expands and contracts said expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat.

The Examiner rejected claims 1-11, 13-18 and 20-24 under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Yamaguchi<sup>1</sup> and Friedson.<sup>2</sup>

## OBVIOUSNESS

### *The Issue*

The Examiner found that Yamaguchi's riding simulator machine had a saddle shaped seat, a drive mechanism, elevator, and swinging motion, but that Yamaguchi's machine did not have an expandable and contractible member on the seating surface. (Ans. 3.) The Examiner found that Friedson's collapsible saddle assembly had an inflatable/deflatable bladder, adjustable to a selected size. (*Id.* at 3-4.) The Examiner concluded it would have been obvious to add such bladders to Yamaguchi's machine for the purposes of providing user comfort and enhancing the seat's motion during operation. (*Id.* at 4.) The Examiner interpreted Appellants' claim term "repeatedly" as not limiting "how or how often, and/or when the mechanism 'repeatedly' expands and contracts the member." (*Id.* at 4, emphasis

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<sup>1</sup> U.S. Patent No. 4,988,300, issued to Masaaki Yamaguchi et al., Jan. 29, 1991.

<sup>2</sup> U.S. Patent No. 6,332,307 B1, issued to Ronald S. Friedson, Dec. 25, 2001.

omitted.) The Examiner interpreted the claim term “during operation” as a statement of intended use, and concluded it did not define a structural difference from the combined teachings of the prior art. (*Id.* at 5.)

Appellants contend that (i) the claimed balance practicing machine would not have resulted from the combined teachings of the two references (App. Br. 7-8); (ii) the Examiner did not provide factual evidence to support the conclusion that it would have been obvious to repeatedly expand and contract Friedson’s bladder 25 during use of Yamaguchi’s machine (*id.* at 8-11); and (iii) nothing in the cited prior art would have led one of ordinary skill to make the modification suggested by the Examiner (*id.* at 11-12). As Appellants read Friedson, cavity 21 may contain a bladder that can be expanded or contracted so as to accommodate a different user or equestrian application. (*Id.* at 7-8.) However, Friedson did “not teach or suggest that the cavity should be, or even could be, expanded or contracted during operation of the drive mechanism . . . much less repeatedly expanded and contracted during operation of the exercising device.” (*Id.* at 8, emphasis omitted.)

The issue in this appeal is whether the Examiner established that the claimed machine would have resulted from the combined teachings of Yamaguchi and Friedson.

### *Findings of Fact*

#### Yamaguchi

1. Yamaguchi described a riding simulator. (Abstract.)

2. Yamaguchi's riding simulator had an artificial horse body 2 (col. 3, ll. 56-59), with a saddle 31 (col. 4, ll. 43-45), and a drive mechanism 16 that imparted a swinging motion to the body (col. 4, ll. 5-26).

#### Friedson

3. Friedson described a collapsible saddle assembly with an expandable and contractible air bladder 25. (Col. 4, l. 64 – col. 5, l. 7.)
4. Friedson's air bladder had a "valved opening" into which a "pump adapter" of a conventional pump could be inserted. (*Id.*)
5. Friedson's air bladder could be "inflated to a selected size" by inserting an adapter and using a conventional pump, or a bleed valve could be used to deflate the bladder "to accommodate a different user or equestrian application." (*Id.*)

#### *Principles of Law*

When determining whether a claim is obvious, an Examiner must make "a searching comparison of the claimed invention – including all its limitations – with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995).

#### *Analysis*

Appellants' machine comprises at least four elements: (1) a seat, (2) a drive mechanism, (3) an expandable and contractible member, and (4) "a mechanism that automatically repeatedly expands and contracts said expandable and contractible member . . . ." The dispute concerns elements (3) and (4). Appellants argue that even if Friedson's air bladder were added

to Yamaguchi's riding simulator, the addition would not provide element (4) of the claim.

We interpret element (4) to define a mechanism, and we therefore do not agree with the Examiner's interpretation that element (4) does not define a structural difference from the prior art. The claim defines element (4)'s mechanism as one that functions "automatically . . . during operation of the drive mechanism." Friedson described an air bladder equipped with a valve opening into which a pump adapter could be inserted for inflation, and a bleed valve with which the bladder could be deflated. The Examiner did not find that Friedson's inflation/deflation mechanism functioned automatically, and did not explain how it would have been obvious to provide automatic function to the device resulting from the combination of the prior art teachings. We find that the rejection did not account for all the claimed elements and conclude that a prima facie case of obviousness was not established.

### CONCLUSIONS OF LAW

On the findings in this record, the Examiner has not established that the claimed machine would have resulted from the combined teachings of Yamaguchi and Friedson.

### SUMMARY

We reverse the rejection of claims 1-11, 13-18 and 20-24 under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Yamaguchi and Friedson.

Appeal 2009-004973  
Application 10/758,019

REVERSED

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